Montana DEQ Nutrient Reduction Efforts September, 2011 George Mathieus

Numeric Standards

- MDEQ has been working on the scientific development of numeric nutrient standards for the past decade.
- Early on, the department recognized that the stringent nature of these standards would make implementation difficult.
- During the 2009 session, DEQ proposed SB 95 which granted the department the authority to establish <u>individual</u> variances to numeric nutrient water quality standards. These variances are limited to a 20-year timeframe.
- The resulting statute directs the department to implement numeric nutrient standards in a staged manner, ensuring protection of water quality without creating an unnecessary financial burden on Montana communities and businesses.
- SB 95 also formalized the department's advisory group (Nutrient Work Group), to work with the
 department on developing the implementation aspects of the variance process for individual
 permits.
- This past legislative session, the department & Nutrient Work Group (NWG) brought forward SB 367. This bill was a direct result of 2 years work, following SB95.

SB 367

- SB367 was a direct result of the 2 years of work between DEQ & NWG.
- SB367---
 - Establishes that a substantial and widespread (EPA term) economic impact would occur
 on Montana businesses and communities by meeting the numeric nutrient standards
 and therefore allows for variances from those standards over a 20-year time period.
 - o In addition to the individual variances established in SB95, created a group categorical variance based on flow...>1MGD, <1MGD, lagoon systems.
 - o Defined permit limits until May 2016
 - Requires reporting to EQC
 - o Requires department review of variances every 3 years

Nutrient Work Group

- Has meet twice since the end of the 2011 legislature.
- Focus has been on finalizing the technical aspects of the rule-making process planned for early 2012.
- Sub-groups were formed to help with remaining tasks
- Sub-Groups are working on public sector widespread analysis

- EPA is paying for a consultant to help us analyze S&W for private sector without infringing on proprietary information
- The department is wrapping up the specific numeric numbers by eco-region for the NWG's review
- The department is finalizing a substantial & widespread demonstration for EPA's review.
- Continuous discussion has occurred with EPA both at the regional and national level. The department has made significant headway
- The department has been in constant consultation with EPA to avoid future approval conflicts during the permitting process

Other Nutrient related topics

The department is addressing the nutrient issues in Montana using a multi-layered approach. The concept is to create as many tools as possible to ensure successful implementation, resulting in clean water for the entire state.

SB 200

- The department supported SB200 during the 2009 legislative session. The bill is now codified into state law. This bill was designed to decrease the influent phosphorous load to municipal wastewater treatment facilities. The percentage decrease in total phosphorus is not certain, but we believe it to be somewhere between 15 to 20%.
- Currently the law only affects counties where numeric nutrient standards exist, i.e.
 Deerlodge, Powell, Granite, Missoula, Mineral, and Sanders.

HB28

 During the 2011 session, the department supported HB28, an interim committee bill that is designed to keep septic effluent mixing zones on the subject property. This will allow for better long-term planning and management of urban growth.

• HB52

- 1. Another successful piece of legislation proposed by the department was HB52. This was the "Re-use" bill that authorizes rule-making that in turn will provide communities voluntary alternatives for wastewater treatment.
- 2. These alternatives can result in significant cost savings, and in many cases create jobs.
- 3. Examples of wastewater "re-use" include, but are not limited to, spray irrigation, fire suppression, dust abatement, etc.
- 4. Minimal treatment (i.e. disinfectant) will be required. Level of treatment will be dependent on type of use.

Trading Policy

 The department has worked with local and regional experts to develop a nutrient trading policy whereby nutrient credit trading could be used to help offset capital improvement cost as well as improve water quality from non point sources. The policy is currently in draft form.

Federal Grant Funding

The department is looking into opportunities to explore, or implement other alternatives for nutrient management. One example was a project funded through ARRA (Stimulus) funding whereby a company (ACCT) has developed on-site greenhouses where they grow algae and subsequently harvest those algae for biofuel, biochar fertilizer, and waste heat. The current project exists at Stoltze Land & Lumber mill site in Columbia Falls. The company utilizes waste wood chips from the milling processes in their efforts to grow algae.

The Department certainly recognizes the importance up including non point sources into an overall long-term strategy. Specifically, NPS from septic systems have earned serious discussion over the past several years. The department is committed to continued dialogue that involves all parties to ensure successful implementation of nutrient reductions in Montana.